# U.S.-Chile Joint Commission for Environmental Cooperation
# 2012 – 2014 Work Program

## Introduction

The Joint Commission for Environmental Cooperation (JCEC), established pursuant to the "United States-Chile Environmental Cooperation Agreement" has developed the following Plan of Action through 2014 that establishes specific goals and objectives and areas for cooperation that reflect national priorities for each Government.

## Background

The Governments of the United States of America and the Republic of Chile signed an Environmental Cooperation Agreement (ECA) on June 17, 2003. In so doing, the Governments recognized the importance of protecting the environment while promoting sustainable development in concert with the expanded bilateral trade and investment ties associated with the 2003 U.S.-Chile Free Trade Agreement (FTA).

The Joint Commission for Environmental Cooperation, set up under the ECA, is responsible for establishing and developing programs of work in accordance with the provisions of Article III of the ECA. This work program reflects national priorities for cooperative activities. During 2012 – 2014, the Governments intend to continue and build upon the cooperative work initiated in previous work programs and to continue to follow up on the themes reflected in each of the projects conducted under the environment chapter of the FTA.

## Priority Areas for Cooperation

The Work Program focuses on the following priority areas, with the following corresponding general objectives:

1. Strengthening effective implementation and enforcement of environmental laws and regulations: Exchange information and experiences on environmental legal and regulatory regimes; enforcement and compliance policies, tools and practices; and approaches to environmental monitoring, that contribute to strengthening the effectiveness of implementation of environmental laws and regulations in the United States and Chile. (See FTA Art. 19.2.1(a); ECA Art. III.2).

2. Encouraging development and adoption of sound environmental practices and technologies, particularly in business enterprises: Encourage enterprises to develop and adopt sound environmental practices and technologies, and to show that doing so not only benefits the environment, but can be done in a manner consistent with maintaining international competitiveness. (See FTA Art. 19.10 (Principles of Corporate Stewardship); ECA Art. III.2(d), Art. V(d)).

3. Promoting sustainable development and management of environmental resources, including wild fauna and flora, protected wild areas, and other ecologically important ecosystems: Promote the conservation and protection of the environment, the prevention of pollution and degradation of natural resources and ecosystems, and the rational use of

natural resources, in support of sustainable development. (See FTA Chapter 19 objectives; ECA Art. III.2(d)).

4. Civil society participation in the environmental decision-making process/Environmental education: Share experiences in promoting public participation in the decision-making process regarding environmental matters, and enhance openness and transparency in regulatory and program implementation. (See FTA Arts. 19.3 and 19.4; ECA Arts. III.1 and IV). Exchange knowledge and experiences regarding environmental education strategies and programs, with a principal focus on basic and community-level education. (See FTA Annex 19.3, Art. 4; ECA Art. V(b)).

## Work Program Activities

This work program consists of two sections. Section One is a matrix of activities for which minimal resources are available, for which programming is already under way, or which are otherwise top priority for implementation. Section Two is a list of priority themes and potential activities of mutual interest for which resources have not been identified (including those corresponding to the above four priority themes, as well as additional areas such as environmental health and natural disasters). The Governments may pursue these activities through initial consultations, exchange of data and sharing of experiences, such as by means of digital video-conferences and electronic communications. Should additional resources become available for more intensive cooperation in these areas, the Governments may develop more specific actions. The Governments intend to identify and exchange lead points of contact for each priority area within three months of approval of this work program. Project leads will be expected to develop, as appropriate, performance measures, and to annually report on progress in implementing projects as well as their outcomes and impacts.

The Governments intend to explore the development of partnerships with private sector and civil society organizations in carrying out their cooperative work wherever possible. The Governments also note ongoing bilateral cooperative work in other fora, and intend to seek through this work program to build upon and complement this existing bilateral work. In addition, the Governments intend to explore opportunities for mutual collaboration in these priority areas with other countries in the Western Hemisphere.

The Commission may augment this work program with additional projects at any time. The Governments recognize that the activities described in this work program are subject to revision by the organizations implementing the projects. The project activities described in this work program are subject to the availability of funds.

## Benchmarks, Monitoring and Evaluation

The Governments recognize that a variety of government agencies and civil society groups would be involved in implementing the programs and projects under this work program, and that the agency or group that leads implementation for a particular program or project will strive to be responsible for public participation, information disclosure, and performance tracking related to that program or project.

As the Governments continue to further define cooperative programs, projects and activities, they intend to encourage implementing partners under the work program to strive to identify performance indicators and benchmarks to better measure progress in furthering the goals and objectives of such programs, projects and activities.

The Governments intend to consider input from relevant local, regional and international organizations regarding cooperation under the work program. The Governments also plan to encourage public participation in setting goals and implementing environmental collaboration, and plan to make information on activities carried out under the work program available to the public.

## SECTION 1: TOP PRIORITY ACTIVITIES TO BE IMPLEMENTED

| Areas | Activities | Sub-activities/Details | Possible Participants |
|---|---|---|---|
| **1. Strengthening effective implementation and enforcement of environmental laws and regulations** | 1.1 Building capacity for assuring compliance with environmental law | 1.1.1 Increase capacity for effective and efficient enforcement and adjudication of environmental cases. Examples of activities could include: creation of curriculum and implementation of workshops for new environmental tribunals on adjudication of environmental enforcement cases and other environmental topics, and information exchanges and workshops related to tools to collect environmental information and support EIA review and preparation, such as NEPAssist. | U.S.: EPA, DOJ, DOS, NGOs<br>Chile: DIMA, MINENV, Superintendencia del Medio Ambiente (SMA), CDE, MINJUSTICIA, Asociación Nacional de Magistrados, Academia de Estudios Judiciales, New Environmental Tribunals, if created, Poder Judicial, DIRECTEMAR |
| | 1.2 Improving approaches for environmental monitoring | 1.2.1 Exchange information related to emergency preparedness and systems for early warning and emergency management in response to natural and human-caused disasters; possible activities include a definitional mission to evaluate feasibility studies for emergency response systems. | U.S.: USTDA<br>Chile: Subtel |
| **2. Development and adoption of sound environmental practices and technologies, particularly in business enterprises** | 2.1 Cooperating on water resources-climate change | 2.1.1 Exchange scientific and technical glacier and water resources monitoring and management information to facilitate a better understanding of existing and future hydrological resources. Identify effective tools and strategies for improved glacier and hydrological monitoring, with an emphasis on the effects of glacial melt of water resources available for potable water and other productive uses. | U.S.: NOAA, DOD (ITC-Americas), DOI/USGS, NSF, universities, DOS<br>Chile: MINENV, Centro de Estudios Científicos (CECS), INACH, DGA, CONAF, SERNAGEOMIN, SAG, DIMA, INFOR, universities |
| | 2.2 Promoting development and use of sustainable consumption and production principles, | 2.2.1 DOE-CNE Cooperation in Clean Energy Technologies: Promote and facilitate scientific, technical and policy aspects of energy efficiency and clean energy technologies through exchange of ideas and information; cooperation efforts will involve Chile's Renewable Energy Center. | U.S.: DOE, DOS<br>Chile: CNE, DIMA, INFOR, MINECON, AChEE, Innova Chile, CER, universities, MinEnergia, SMA |
| | | 2.2.2 Promote the adoption of cleaner production practices and techniques in institutions including small and medium enterprises, | U.S.: DOS, EPA, DOE, NGOs, universities |

| Areas | Activities | Sub-activities/Details | Possible Participants |
|---|---|---|---|
| | including clean energy | encourage the development of sound environmental practices and technologies in the private sector, increase the capacity to implement cleaner production practices, and help ensure that increased production resulting from trade will be performed in an environmentally sound manner. | Chile: DIMA, MINENV, CNE, MINECON, Consejo de Producción Limpia, universities, private companies, NGOs, business associations, SMA |
| | | 2.2.3 Exchange information on respective voluntary “beyond compliance” initiatives and dialogue to explore public-private partnerships and interactions between U.S. and Chilean private sector entities to promote cleaner production. | U.S.: DOS, EPA, DOE<br>Chile: DIMA, MINENV, CNE, Consejo de Producción Limpia, MINECON, private companies, business associations, SMA |
| | | 2.2.4 Through a Reverse Trade Mission: technical exchanges on Smart Grid Technologies and Policy to familiarize legislators, regulatory and power utility company representatives with the most recent regulatory advancements in the smart grid arena and solutions for effective smart grid implementation. | U.S.: USTDA<br>Chile: Senate, MinEnergia |
| | 2.3 Reducing environmental impacts of mining | 2.3.1 Strengthen relevant mining agencies and the institutions and structures that govern the mining and reduce the environmental impacts of mining through consultations, joint-activities, and technical exchanges on topics such as: environmental assessment of mining projects, land use planning, low-cost solutions for problems associated with mining, public/private initiatives on clean production for the small-scale mining sector, financial assurance mechanisms, regulatory and inspection requirements, mine decommissioning plans, regulatory standards in mining permits, and working together to exchange available information on substances of common interest, such as mercury, sulfur dioxide or others. | U.S.: EPA, DOI, USTDA, DOS<br>Chile: DIMA, MINENV, MINMINERIA, SERNAGEOMIN, Consejo Nacional de Producción Limpia, ENAMI, SONAMI, MINSALUD, SMA |
| | 2.4 Improving agricultural practices | 2.4.1 Technical exchanges to build capacity on environmental impact assessment in agricultural decision-making and the promotion of follow-up exchanges, among other topics. | U.S.: USDA/APHIS, DOS<br>Chile: SAG, DIMA, MINENV |
| **3. Promoting** | 3.1 Building | 3.1.1 Continue to support conservation-volunteer programs and promote | U.S.: USDA/FS, DOI/NPS, |

| Areas | Activities | Sub-activities/Details | Possible Participants |
|---|---|---|---|
| **biodiversity conservation and sustainable development** | capacity for marine and terrestrial protected area management and sustainable tourism | increased Chilean participation. Monitor prior volunteer work projects to identify best practices for trail repair and habitat restoration projects. Possible follow-on activities include assistance in developing Chilean volunteer programs. | DOS, Conservation VIP and other NGOs<br>Chile: CONAF, MINENV, DIMA, Fundación Patagonia |
| | | 3.1.2 Exchange best practices in marine and terrestrial protected area management, including indicators/standards to monitor visitor impact, management of human waste/garbage, tools to measure satisfaction of visitors and communities involved in management of the area, tourism concessions and benefit sharing among agencies and communities, habitat and ecosystem restoration, and training for tourist guides and park volunteers. This may be done through workshops, study tours, email exchanges and other means. | U.S.: DOS, DOI/NPS, NOAA, USFS, USDA/FS<br>Chile: CONAF, MINENV, SERNATUR, DIMA, Fundación Patagonia, DIRECTEMAR, MINECON |
| | | 3.1.3 Support the "Protected Area Partners" Programs and sister parks agreements to foster cooperation in the long-term protection of natural and cultural heritage, to improve management, interpretation and conservation of protected areas, and to strengthen parks and protected areas systems and institutions. Efforts will include support to the existing Yosemite NP – Torres del Paine NP Sister Park partnership and the Glacier Bay NP - Francisco Coloane National Park and Preserve. | U.S.: DOS, DOI/NPS, NOAA, USFS, USDA/FS<br>Chile: CONAF, MINENV, SERNATUR, DIMA, Fundación Patagonia, DIRECTEMAR, MINECON |
| | | 3.1.4 Cape Horn Biosphere Reserve Biocultural Conservation Project: strengthen the capacity of public agencies and the private sector to administer and work in the biosphere reserve and associated national parks, improve information and knowledge creation and transfer about this remote area to enhance decision-making, and generate new opportunities via sustainable and equitable tourism by strengthening local business ventures in this field. | U.S.: DOS, U of N. Texas, EPA, DOI/NPS<br>Chile: Universities, OSARA, CONAF |
| | | 3.1.5 Train-the-trainer workshops for protected area managers and park guards; exchange Chilean and U.S national and/or state-level government professionals. Spanish language manuals have been developed, including a train-the-trainer's manual and specific manuals on Conservation of Protected Areas, Roles and Responsibilities of Park Guards, Management of Natural Resources, Management of Public Use and Communication, and Operation and Protection of Protected Areas. | U.S.: USDA/FS, DOS, DOI/NPS, NOAA, USFS<br>Chile: CONAF, MINENV, SERNATUR, DIMA, MINECON, Fundación Patagonia |

| Areas | Activities | Sub-activities/Details | Possible Participants |
|---|---|---|---|
|  | 3.2 Ensuring sustainable wildlife and plant trade | 3.2.1 Strengthen institutional capacity in Chile's new Biodiversity and Protected Areas Service through joint cooperation to exchange best practices and lessons learned for institutional strengthening. Example topic areas could include: combating the illegal trade in wildlife, particularly in the framework of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); strengthening coordination of responsibilities within the new Biodiversity Service and relevant services in the Department of the Interior; improving coordination with other environmentally-relevant entities; and, strengthening capabilities for the enforcement of natural resource and biodiversity related laws. | U.S.: DOS, DOI, USFWS, DOJ, USTR, NGOs<br>Chile: DIMA, MINENV, SAG, CONAF, Aduanas, PDI, NGOs |
|  |  | 3.2.2 Exchange of information and experiences related to eradicating, controlling, and preventing the transmission of invasive alien species, including: practical decision making tools for invasive alien species management, evaluating trade impacts of invasive alien species, proposals for border controls to prevent the entry of invasive alien species, and preventing effects of ballast water. | U.S.: USDA, EPA, DOI, FWS, DOS, NISC; DHS/CBP, DHS/CG<br>Chile: MINENV, SAG, Aduanas, SUBPESCA, SERNAPESCA, CDE, CONAF, DIRECTEMAR, DIMA |
|  | 3.3 Exchanging information and experiences on marine science and fisheries | 3.3.1 Pursuant to the U.S.-Chile Fisheries Cooperation Talks, consultations, exchanges of information and experience, and joint collaboration on marine and fisheries issues, including promoting marine conservation and capacity building for improved fisheries management and enforcement, such as: supporting the International Monitoring Compliance and Surveillance (MCS) Network and preventing illegal, unregulated and unreported (IUU) fishing through exchange of information and implementation of IUU Fishing National Plans. | U.S.: NOAA, DOS<br>Chile: SUBPESCA, SERNAPESCA, DIMA, MINENV |
|  |  | 3.3.2 Facilitate cooperative efforts between the two governments and with industry related to the advancement of scientific knowledge and technologies for environmental aspects of aquaculture, including data exchange, information on new regulations and enhanced disease detection and response measures. | U.S.: USDA/APHIS, NOAA, DOS<br>Chile: SUBPESCA, MINENV, SERNAPESCA, DIMA |

| Areas | Activities | Sub-activities/Details | Possible Participants |
|---|---|---|---|
| **4. Civil society participation in the environmental decision-making process/Environmental Education** | 4.1 Sharing experiences in promoting public participation in environmental decision-making, laws, procedures, approaches and techniques | 4.1.1 Build capacity of government institutions to increase public participation in environmental decision-making and continue technical consultations to: exchange information on laws, procedures and approaches pertaining to public participation; and, exchange techniques to facilitate civil society participation in collaborative approaches to resolving environmental problems that affect communities. | U.S.: EPA, DOS, NGOs, USTR<br>Chile: DIMA, MINENV, NGOs |
| | | 4.1.2 Collaborate on methods for providing input to and receiving recommendations from advisory or other committees intended for appropriate national bodies. | U.S.: EPA, DOJ, DOS, NGOs, USTR<br>Chile: DIMA, DIRECON, MINENV, NGOs |
| | 4.2 Exchange best practices on environmental education | 4.2.1 Facilitate cooperative exchanges between the governments and the educational community on environmental education with an emphasis on building capacity for integration of environmental education in both formal and informal settings. | U.S.: EPA, DOS, NASA, GLOBE Program<br>Chile: DIMA, MINENV, MINEDUC, Educational associations |

## SECTION TWO: PRIORITY ACTIVITIES FOR ADDITIONAL OR FOLLOW-UP TECHNICAL CONSULTATIONS

### 1. Environmental laws, regulations and enforcement:

- Approaches to effective environmental regulation for pollution control, fresh water evaluation and monitoring (including wetlands), hazardous and solid wastes, toxic chemicals and natural resource management.
- Cooperation on new technologies for measuring and mitigating vehicle emissions, technical support in the implementation of emissions control programs and strategies to improve and increase control of vehicle emissions.
- Capacity building (fellowships, workshops, etc) for officers (engineers, geologist, etc) that take part as expert witnesses in environmental judicial investigations and litigation.

Possible Partners:
U.S.: EPA, DOI, DOJ, USDA-FS, DOS, NGOs
Chile: DIMA, MINENV, SAG, CONAF, MINSAL, MTT, MOP (DGA and DOH), SERNAGEOMIN, Aduanas, MINDEF, CDE, DIRECTEMAR, SUBPESCA, SERNAPESCA, SMA

### 2. Sound environmental practices and technologies, particularly in business enterprises:

- Provide support to the implementation of a green procurement process in the Chilean government.
- Promote capacity for cleaner production in other countries in the Latin America and Caribbean region through joint initiatives.
- Utilize an Embassy Science Fellow to work in Energy Sector.
- Promote energy and fuel efficiency and reduce pollution in the transport sector, including DVC follow-up to the Diesel Retrofit project under the FTA, support to the Clean Fuels Partnership initiative, and promotion of electric and hybrid vehicles.
- Continue consultations (expert speakers via DVC) on approaches to promoting sustainable agriculture and appropriate handling of pesticides and fertilizers and on how to reduce the use of methyl bromide.
- Support Chile's national policies on chemicals and provide technical support for the implementation of the mercury management national program.
- Provide technical support for the implementation of SAICM, in particular lead in paint.
- Continue *ad hoc* consultations and information exchange to support Chile's Pollutant Release and Transfer Registry; serve as a regional resource on PRTR.

Possible Partners:
U.S.: DOS, EPA, DOE, DOC, NREL, USTDA, universities, State environmental agencies, trade associations, private companies, NGOs
Chile: DIMA, MINENV, CNE, MINMINERIA, SAG, MINVU, MINECON, Consejo de Producción Limpia, SERNAGEOMIN, MOP, MTT, CONAF, Aduanas, universities, private companies, other related ministries and services, NGOs, business associations

## 3. Conservation of Biodiversity and Sustainable Management of Natural Resources:

A. Forest Management and Illegal Timber Harvesting:

- Approaches to remote sensing of forest activities and technologies for timber tracking.

Possible Partners:
U.S.: DOI/FWS, USDA/FS, DOJ, DOS, NASA
Chile: DIMA, CONAF, MINENV, CDE, CORMA, INFOR, DIRECON

B. Sustainable Communities in Patagonia:

- Support efforts for the development of a model sustainable/low-carbon community in the Patagonia region by contributing to environmental, clean energy/energy efficiency and economic development components; public/private partnership to develop an environmental blueprint for sustainable buildings in Patagonia, starting with a plan for a pilot/demonstration building in Karukinka Park (climate appropriate eco-friendly building materials and design, sustainable water sources, renewable energy (wind/solar) and energy efficiency measures, and sustainable transportation).

Possible Partners:
U.S.: DOI/NPS, USDA/FS, DOS
Chile: Chile's Catholic University, Patagoina Sur Foundation, municipality of Palena, public/private sector, INFOR

## 4. Disasters:

- Volcano monitoring and supervision
- Establishing models for mass evacuations and early warning systems
- Collaboration and exchange of experience on Tsunami disasters with an emphasis on technology exchange and mathematical modeling used by specialized laboratories in the United States.

Possible Partners:
U.S.: NOAA, DOI/USGS, USDA/FS, DOS
Chile: DIMA, MINENV, MINVU, MOP, MTT, National Emergency Office (ONEMI), MINEDUC, SERNAGEOMIN, SHOA, DIRECTEMAR, SMA

## ANNEX 1: LIST OF AGENCIES / ACRONYMS

| United States | Chile |
|---|---|
| • Department of Agriculture (USDA)<br>o U.S. Forest Service (FS)<br>• Department of Commerce (DOC)<br>o National Oceanic and Atmospheric Administration (NOAA)<br>• Department of Energy (DOE)<br>o U.S. National Renewable Energy Laboratory (NREL)<br>• Department of Health and Human Services (HHS)<br>• Department of Homeland Security (DHS)<br>o Customs and Border Protection (CBP)<br>o U.S. Coast Guard (USCG)<br>• Department of Interior (DOI)<br>o U.S. National Park Service (NPS)<br>o U.S. Bureau of Land Management (BLM)<br>o U.S. Fish & Wildlife Service (FWS)<br>o U.S. Geological Survey (USGS)<br>• Department of Justice (DOJ)<br>• Department of State (DOS)<br>• Environmental Protection Agency (EPA)<br>• National Aeronautic and Space Administration (NASA)<br>• National Invasive Species Council (NISC)<br>• U.S. Trade Development Administration (USTDA)<br>• U.S. Trade Representative (USTR) | • Agricultural and Livestock Service (SAG)<br>• Direction General of Maritime Territory and Merchant Marine (DIRECTEMAR)<br>• Direction of Environmental, Antarctic and Maritime Affairs, Ministry of Foreign Affairs (DIMA)<br>• Direction of International Economic Relations (DIRECON)<br>• General Water and Water Works Directorates, (DGA and DOH)<br>• Chilean Forest Research Institute (INFOR)<br>• Ministry of Defense (MINDEF)<br>• Ministry of Health (MINSAL)<br>• Ministry of Public Works (MOP)<br>• Ministry of Transport and Telecommunications (MTT)<br>• National Customs Service (Aduanas)<br>• National Energy Commission (CNE)<br>• Ministry of Economy (MINECON)<br>• Ministry of Education (MINEDUC)<br>• Ministry of Energy (MinEnergia)<br>• Ministry of Urban Housing (MINVU)<br>• National Fisheries Service (SERNAPESCA)<br>• National Geologic and Mining Service (SERNAGEOMIN)<br>• Ministry of the Environment (MINENV)<br>• National Forest Corporation (CONAF)<br>• State Defense Council (CDE)<br>• National Tourism Service (SERNATUR)<br>• Undersecretariat of Fisheries (SUBPESCA)<br>• Ministry of Mining (MINMINERIA)<br>• National Clean Production Council<br>• National Mining Enterprise (ENAMI)<br>• National Mining Association (SONAMI)<br>• National Emergency Office (ONEMI)<br>• Naval Hydrographic and Oceanographic Service (SHOA)<br>• Chilean Investigation Police (PDI)<br>• Ministry of Justice (MINJUSTICIA)<br>• Ministry of Agricultural (MINAGRI) |

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